

REMARKS

In the October 22, 2008 Office Action, all of the claims 1-15 stand rejected in view of prior art. No other objections or rejections were made in the Office Action.

Status of Claims and Amendments

None of the claims are being amended by the current Amendment. Thus, claims 1-15 are pending, with claims 1 and 15 being the only independent claims. Reexamination and reconsideration of the pending claims are respectfully requested in view of the following comments.

Information Disclosure Statements - 2nd Request

KR1998-071723, which was cited in the November 21, 2007 Information Disclosure Statement, was not initialed as being considered on the form 1449 attached to the April 21, 2008 Office Action. Since US 5,927,093, which was also cited in this Information Disclosure Statement, is an English language counterpart of KR1998-071723 (and was submitted in lieu of translation) in accordance with M.P.E.P. §609.04(a) on page 600-153 of the M.P.E.P., Applicants respectfully request that this reference be initialed on form 1449 as being considered.

Also, Japanese 1998 Cooling and Heating Handbook, Air Conditioning Volume, Mitsubishi Heavy Industries, Ltd., which was cited in the May 30, 2006 Information Disclosure Statement, was not initialed as being considered on the form 1449 attached to the April 21, 2008 Office Action. Since a concise statement of the relevance of this publication was provided in the May 30, 2006 Information Disclosure Statement in accordance with M.P.E.P. §609.04(a) on page 600-153 of the M.P.E.P., Applicants respectfully request that this reference be initialed on form 1449 as being considered.

Rejections - 35 U.S.C. § 103

On pages 2-4 of the Office Action, claims 1-15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Japanese Patent Publication No. 2003-262435 (Kishimoto) in view of Japanese Patent Publication No. 2002-276970 (Tamura). In response, Applicants respectfully traverse this rejection, as explained below.

Claims 1-14

Independent claim 1 requires, *inter alia*, said first branch nozzle part is covered, during plumbing work, with a heat insulating material, which covers said branch part, up to the position of said first direction branch part side less than the tip part connected to said first branch pipe. In other words, the first branch nozzle part of the branching pipe joint of claim 1 is covered with the heat insulating material which covers the Y-pipe shaped branch part up to the position of said first direction branch part side less than the tip part connected to said first branch pipe. Contrary to the assertions of the Office Action, this unique arrangement is not disclosed or suggested by the Kishimoto publication and/or the Tamura publication, whether taken singularly or in combination.

The Kishimoto publication (JP2003-262435) does not include such a heat insulating material whatsoever, as acknowledged in the Office Action. However, the Office Action indicates that a heat insulating material arranged as set forth in independent claim 1 would be obvious based on the Tamura publication. Applicants disagree. The Tamura publication (JP2002-276970) discloses heat insulating material 7 which covers all the portions of the connection piping 8 containing the bended portion of the connection piping 8 in the indoor unit except for the connection portion of the connection piping 8 with the heat exchanger 5. However, the Tamura publication does not disclose the claimed arrangement of the heat insulating material (i.e., the heat insulating material covering the first branch nozzle part covers the Y-pipe shaped branch part up to the position of the first direction branch part side less than the tip part connected to the first branch pipe, therefore, the first branch pipe is not covered with the heat insulating material covering the first branch nozzle part.). In other words, the Tamura publication teaches one of ordinary skill in the art to cover the entire so-called first branch nozzle part, and thus, teaches away from the arrangement set forth in independent claim 1. For this reason, even if one of ordinary skill in the art combined the Kishimoto publication (JP2003-262435) and the Tamura publication (JP2002-276970), the features of claim 1 would not result. Rather, the tip part of the first branch nozzle part would be covered by heat insulating material as taught by the Tamura publication (JP2002-276970). Accordingly, withdrawal of this rejection of independent claim 1 is respectfully requested.

With the branching pipe joint of independent claim 1, it is possible to reduce the size of the heat insulating material and to reduce the troublesome time when performing the

racking process. Moreover, it is possible to connect the first branch pipe to the first branch nozzle part in the state where the heat insulating material is affixed to the branching pipe joint during plumbing work. Furthermore, the heat insulating material arrangement set forth in independent claim 1 results in an arrangement where the first branch pipe is easily connectable with the first branch nozzle part. This effect cannot be acquired by combining the Kishimoto publication (JP2003-262435) and the Tamura publication (JP2002-276970) since the so-called tip part would be covered as taught by the Tamura publication (JP2002-276970). Accordingly, withdrawal of this rejection of independent claim 1 is respectfully requested.

Under U.S. patent law, the mere fact that the prior art can be modified does *not* make the modification obvious, unless an *apparent reason* exists based on evidence in the record or scientific reasoning for one of ordinary skill in the art to make the modification. See, KSR Int'l Co. v. Teleflex Inc., 127 S.Ct. 1727, 1741 (2007). The KSR Court noted that obviousness cannot be proven merely by showing that the elements of a claimed device were known in the prior art; it must be shown that those of ordinary skill in the art would have had some "apparent reason to combine the known elements in the fashion claimed." *Id.* at 1741. The current record lacks any apparent reason, suggestion or expectation of success for combining the patents to create Applicants' unique arrangement of independent claim 1.

Moreover, Applicants believe that the dependent claims 2-14 are also allowable over the prior art of record in that they depend from independent claim 1, and therefore are allowable for the reasons stated above. Also, the dependent claims 2-14 are further allowable because they include additional limitations, which in combination with the limitations of independent claim 1, are not disclosed or suggested in the prior art of record. Thus, Applicants believe that since the prior art of record does not disclose or suggest the invention as set forth in independent claim 1, the prior art of record also fails to disclose or suggest the inventions as set forth in the dependent claims. Accordingly, withdrawal of this rejection of claims 2-14 is respectfully requested.

Claim 15

Independent claim 15 requires, *inter alia*, connecting said branching pipe joint to said union connecting piping in accordance with a number of said outdoor units prior to connecting said first branch pipe to said branching pipe joint, said branching pipe joint being

connected to said union connecting piping in a horizontal arrangement so that said first branch nozzle part and said second branch nozzle part serve as a horizontal branch arrangement at a common height position; and connecting said first branch pipe to said first branch nozzle such that said other end part of said first branch pipe is horizontally disposed relative at the common height position of said first and second branch nozzle parts, and subsequently moving said first branch pipe relative to said first branch nozzle part to a height position spaced from said common height position in order to connect said union connecting piping to a connection port of one of said outdoor units that is disposed at the height position spaced from the common height position.

The Kishimoto publication (JP2003-262435) does not indicate the branching method of new claim 15. Moreover, paragraph [0018] of the Kishimoto publication indicates "The bottom branch pipe 23 is arranged at the state where it inclined to the level surface, and the 2nd end connection 27 is in a position higher than the 4th end connection 32." Thus, the branching method of the Kishimoto publication *teaches away* from the horizontal branch arrangement of the Y-pipe shaped branch part of new claim 15. The Office Action does not address this deficiencies of the Kishimoto publication, which were pointed out in the Arguments of the July 14, 2008 Amendment. Moreover, the Tamura publication (JP2002-276970) does not account for these deficiencies of the Kishimoto publication with respect to independent claim 15. Accordingly, withdrawal of this rejection of independent claim 15 is respectfully requested.

Under U.S. patent law, the mere fact that the prior art can be modified does *not* make the modification obvious, unless an *apparent reason* exists based on evidence in the record or scientific reasoning for one of ordinary skill in the art to make the modification. See, KSR Int'l Co. v. Teleflex Inc., 127 S.Ct. 1727, 1741 (2007). The KSR Court noted that obviousness cannot be proven merely by showing that the elements of a claimed device were known in the prior art; it must be shown that those of ordinary skill in the art would have had some "apparent reason to combine the known elements in the fashion claimed." *Id.* at 1741. The current record lacks any apparent reason, suggestion or expectation of success for combining the patents to create Applicants' unique arrangement of independent claim 15.

Appl. No. 10/580,909
Amendment dated January 13, 2009
Reply to Office Action of October 22, 2008

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In view of the foregoing comments, Applicants respectfully assert that claims 1-15 are now in condition for allowance. Reexamination and reconsideration of the pending claims are respectfully requested. If there are any questions regarding this Response, please feel free to contact the undersigned.

Respectfully submitted,

/Patrick A. Hilsmier/
Patrick A. Hilsmier
Reg. No. 46,034

GLOBAL IP COUNSELORS, LLP
1233 Twentieth Street, NW, Suite 700
Washington, DC 20036
(202)-293-0444
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